
NASA/CSA Payloads in Columbus for Increments 47&48



NASA-ESA TIM

November 10, 2015



*Ricardo C. Rodriguez
Payload Operations Integration Center
I47/48 Payload Operations Manager*

Human Research Racks 1 and 2

No new HRP experiments for Increment 47/48.

Equipment

- SLAMMD (HRF1)
- HRF PC 1 (HRF1)
- HRF PC 3 (HRF1)
- Ultrasound 2 / VPC (HRF1 or 2)
- PFM/PAM (HRF2)
- GDS (HRF2)
- Refrigerated Centrifuge (HRF2)
- HRF PC2 (HRF2)

Crew Activities

No use is planned

Support for various investigations

Support for Fluid Shifts and Cognition

Ultrasound Scans for various investigations

No use is planned

No use is planned

Blood Collections for various investigations

Support for various investigations

HRP uses ESA hardware

- Portable Pulmonary Function System (PPFS) used for Sprint
- CDL HLTA BP device used for Fluid Shifts, Ocular Health and Cardio Ox
- ESA Control Pad used for NeuroMapping



EXPRESS Rack 3

Equipment

- EMCS
- Veggie
- **Maritime Awareness***
- SAMS II Sensor

Crew Activities

Installation/removal of Plant RNA
Regulation Experiment Containers

No use is planned

Installation and power-up

Possible relocation to support ESA
investigations

*** New Payload for Inc 47/48**



Miscellaneous

Equipment

- MVIS (FSL)
- CardioLab (EPM)

Crew Activities

CSA MVIS Controller-1 investigation
CSA Vascular Echo investigation